

418	<b>COMPUTER GRAPHICS PROCESSING</b>	611	..Anti-aliasing or image smoothing
419	.Three-dimension	612	...Save attributes for each object affecting a given pixel
420	..Solid modelling	613	...Subpixel processing
421	..Hidden line/surface determining	614	...Pixel fragment
422	....Z buffer (depth buffer)	615	...Convolving technique
423	..Tessellation	616	...Error diffusion
424	..Voxel	617	..Contrast
426	..Lighting/shading	618	..Image with abnormal condition
427	..Space transformation	619	.Graphic manipulation (object processing or display attributes)
428	.Adjusting level of detail	620	..Clipping
581	.Attributes (surface detail or characteristic, display attributes)	621	...Based on model of objects
582	..Texture	622	....Testing or using bounding shape (e.g., bounding box sphere)
583	...Solid Texture	623	....Object clipped to view volume
584	...Bump map	624	....Object clipped to another object
585	...Non-planar surface	625	...Based on image data
586	...Mathematically defined	626	....Masking
587	...MIP map	627	....Non-rectangular array
588	...Repeating pattern	628	....Rectangular region
589	..Color or intensity	629	..Merge or overlay
590	...Gamut clipping or adjustment	630	...Combining model representations
591	...Color processing in perceptual color space	631	...Reducing redundancy
592	...Transparency (mixing color values)	632	...Placing generated data in real scene
593	...Color selection	633	....Augmented reality (real-time)
594	....Using GUI	634	...Image based
595	....Expert system or AI	635	....Non-overlapping
596	....Dither or halftone	636	....Character and graphics
597	....Color	637	....Priority based
598	.....Spatial	638	....Insertion of bitmapped moving picture
599	....Spatial	639	....Weighted
600	...Color bit data modification or conversion	640	.....Weights vary across image (e.g., transition from foreground to background)
601	....Using look up table	641	....Fixed overlay pattern
602	.....Plural look up tables	642	..Picking
603	....Format change (e.g., NTSC to RGB, RGB to composite, XYZ to RGB)	643	..Arithmetic processing of image data
604	....Color space transformation (e.g., RGB to YUV)	644	..Matrix calculations
605	....Change in number of bits for a designated color (e.g., 4 bits to 8 bits, 8 bits to 4 bits)	645	...Hierarchy of transformations (e.g., hierarchy of global and local coordinate)
606	..Interpolation of attribute values across object surface	646	..Morphing
607	...In perspective	647	..Distortion
608	...Tri-linear	648	..Affine
609	...Bi-linear		
610	...Linear		

649	...Rotation	689	..Textual entry or display of manipulation information (e.g., enter or display degree of rotation)
650	...Graphical user interface tools		
651	....Alignment functions (e.g., snapping, gravity)	440	.Graph generating
652	....Constrained manipulations (e.g., movement in less than all dimensions)	440.1	..Real-time waveform display
653	....3D manipulations	440.2	..Bar graph
654	....2D manipulations	441	.Shape generating
655	....Object based	442	..Curve
656	....Image based (addressing)	443	..Straight line
657	....By arbitrary angle	467	.Character generating
658	....By 90 degrees increment	468	..Character geometry processing
659	....Image rotates in response to display device orientation	469	...Character generation using control points or hints
660	..Scaling	469.1	..Character border
661	...Graphical user interface tools	470	..Generating character fill data from outline data
662	....Alignment functions (e.g., snapping, gravity)	471	..Alteration of stored font
663	....Constrained manipulations (i.e., movement in less than all dimensions)	472	...Scaling
664	....3D manipulations	472.1	....Reduction only
665	....2D manipulations	472.2	....Enlargement only
666	....Object based	472.3	..Calligraphic
667	....Image based (addressing)	473	.Animation
668	....By arbitrary ratio	474	..Motion planning or control
669	....By integer multiples	475	..Temporal interpolation or processing
670	....Reduction only	700	<b>OPERATOR INTERFACE (E.G., GRAPHICAL USER INTERFACE)</b>
671	....Enlargement only	701	.Force feedback interaction
672	..Translation	702	.Tactile based interaction
673	...Averaging technique	703	.Cultural based (including language, time, monetary units displayed)
674	...Copying data to create additional rows or columns	704	.Playback of recorded user events (e.g., script or macro playback)
676	...Graphical user interface tools	705	.Help presentation
677	....Alignment functions (e.g., snapping, gravity)	706	..Virtual character or avatar (e.g., animated person)
678	....Constrained manipulations (i.e., movement in less than all dimensions)	707	..Adaptive to user skill level
679	....3D manipulations	708	..Context sensitive
680	....2D manipulations	709	...Coaching (e.g., animated examples, or handholding or show me execution)
681	....Object based	710	...Input alert
682	....Image based (addressing)	711	...Tool tip (e.g., cursor position based)
683	....Sprite	712	..Topic roadmap or index
684	....Scrolling	713	....Hierarchical
685	.....Alphanumeric	714	..Combining diverse help information (e.g., different sources)
686	.....Memory addressing	715	..Balloon or bubble appearance
687	.....Smooth or continuous		
688	.....Attribute changes during scrolling		

716	.On screen video or audio system interface	748	.User interactive multicomputer data transfer (e.g., file transfer)
717	..Multiple diverse systems		..Downloading remote executables (e.g., Java, CGI)
718	...Mode switching interface (e.g., switching between TV and computer)	749	.Multiple users on a single workstation
719	...Video interface	750	.Computer supported collaborative work between plural users
720	...Video traversal control	751	..Interactive email
721	....Indexed control		..Computer conferencing
722	...Video parameter control	752	...Multicursor (e.g., multiple on-screen pointers)
723	..For video segment editing or sequencing	753	...Floor Control
724	...Cut and paste operation	754	...Real Time Video
725	...Trimming	755	...Virtual 3D environment
726	...Effects or transitions interface	756	...Chat room
727	.Audio user interface	758	..Group window
728	..Audio input for on-screen manipulation (e.g., voice controlled GUI)	759	.Mark up language interface (e.g., HTML)
729	..For a visually challenged user	760	.Plural adjacent interactive display devices
730	.Presentation to audience interface (e.g., slide show)	761	.User interface development (e.g., GUI builder)
731	..Authoring tool	762	..Graphical or iconic based (e.g., visual program)
732	..Slide manipulating or editing	763	.On-screen workspace or object
733	.For plural users or sites (e.g., network)	764	..Customizing multiple diverse workspace objects
734	..Interactive network representation of devices (e.g., topology of workstations)	765	..Z order of multiple diverse workspace objects
735	...Configuration	766	..Focus control of multiple diverse workspace objects
736	...Network managing or monitoring status	767	..Translucency or transparency interface element (e.g., invisible control)
737	...User navigation between devices	768	..Data transfer operation between objects (e.g., drag and drop)
738	..Network resource browsing or navigating	769	...Cut and paste
739	...Selecting from a resource list (e.g., address book)	770	..Instrumentation and component modeling (e.g., interactive control panel, virtual device)
740	..Remote operation of computing device	771	...Progress or activity indicator
741	..Access control or permission	772	..Virtual input device (e.g., virtual keyboard)
742	...Interactive portal (e.g., secure point of access)	773	..Ticker metaphor
743	...Access rights to interactive controls	774	..Office layout metaphor (e.g., filing cabinet, desk)
744	..Interface customization or adaption (e.g., client server)	775	..Indexed book or notebook metaphor
745	...Based on stored usage or user profile (e.g., frequency of use, cookies)	776	..Tab metaphor (e.g., property sheet)
746	...Interface conversion	777	..Multiple virtual screen or desktop switching
747	...End user based (e.g., preference setting)	778	

779	..Task bar or desktop control panel	814	...Limited time selection opportunity
780	..Entry field (e.g., text entry field)	815	...Sizing modification (e.g., scaling)
781	..Window or viewpoint	816	...Partial input lookup (e.g., partial string lookup)
782	...3D Perspective view of window layout	817	...Context location indication (e.g., previous or next menu item indication)
783	...On-screen window list or index	818	....Simultaneous next and previous indication (e.g., menu road map)
784	....Window scrolling	819	....Next menu indication
785	.....Autoscroll	820	....Previous menu indication
786	.....Scroll tool (e.g., scroll bar)	821	....Emphasis
787	.....With content attributes on scroll tool	822	....Preselection emphasis
788	...Layout modification (e.g., move or resize)	823	....Selection or confirmation emphasis
789	....Based on usage or user profile (e.g., frequency of use)	824	....Unavailable emphasis
790	....Overlap control	825	....Dynamically generated menu items
791	.....Always on top	826	...Add on item (e.g., software developed, customized)
792	.....Tiling or split pane	827	...Mnemonic (e.g., accelerator key)
793	.....Cascading	828	...Partial menu display (e.g., one menu item at a time)
794	.....Priority or overlap change (e.g., z-order)	829	....Advancing to next menu item in the same menu
795	.....Minimizing or send to bottom	830	.....Scrolling (e.g., spin dial)
796	.....Bring to top	831	....With specific input device
797	.....Viewing lower priority windows (e.g., overlapped windows)	832	...Analog selection style
798	...Combining moving and resizing operations (e.g., moving causes resizing)	833	...Slider control
799	....Moving (e.g., translating)	834	...Radial based (e.g., radial or pie menu)
800	....Resizing (e.g., scaling)	835	...Selectable iconic array
801	.....Contained object scale change	836	....3D icons
802	...Focus control	837	....Compound or aggregate icon
803	...Window differentiation	838	....Thumbnail or scaled image
804	...Interwindow link or communication	839	....Imitating real life object
805	....On-screen link or communication (e.g., cue)	840	...Using button array
806	...Window memory structure	841	...Sub-menu structure
807	....Stored priority attribute	842	....Tear off
808	..Pop-up control	843	....Pull down
809	..Dialog box	844	...Timed
810	..Menu or selectable iconic array (e.g., palette)	845	...Multiple selections in a single menu
811	...Based on usage or user profile (e.g., frequency of use)	846	..Non-array icons
812	....Preselection (e.g., best guess before mouse click)	847	...Shortcut
813	....Default selection item	848	..Interface represented by 3D space
		849	...Individual object
		850	...Navigation within 3D space
		851	....On-screen navigation control

852	...Picking 3D objects	177	.Including surface acoustic detection
853	..Hierarchy or network structure		..With alignment or calibration capability (i.e., parallax problem)
854	...Navigation within structure	178	.Stylus
855	....On-screen roadmap or index		.Light pen for CRT display
856	..Cursor		..CRT having tracking capability
857	...Pointer direction adjustment	179	.Light pen for fluid matrix display panel
858	...Automatic position adjustment	180	.Light pen for controlling plural light-emitting display elements (e.g., LED, lamps)
859	...Status indicator	181	.Mechanical control (e.g., rotatable knob, slider)
860	....Selection emphasis	182	<b>COMPUTER GRAPHIC PROCESSING SYSTEM</b>
861	....Dynamically changed appearance (e.g., animated or live action)	183	.Plural graphics processors
862	...Proximity detection		..Coprocessor (e.g., graphic accelerator)
863	.Gesture-based	184	..Master-slave processors
864	.For a small display screen (e.g., personal digital assistant, palm-top)	501	..Parallel processors (e.g., identical processors)
865	.Miscellaneous interface for the handicapped or disabled user	502	..Pipeline processors
866	.Miscellaneous customization or adaptation	503	..Integrated circuit (e.g., single chip semiconductor device)
867	<b>SCREEN SAVER DISPLAY</b>	505	.Interface (e.g., controller)
156	<b>DISPLAY PERIPHERAL INTERFACE</b>		.Graphic command processing
	<b>INPUT DEVICE</b>		<b>COMPUTER GRAPHICS DISPLAY MEMORY SYSTEM</b>
157	.Cursor mark position control device	506	.Graphic display memory controller
158	..Including orientation sensors (e.g., infrared, ultrasonic, remotely controlled)	519	..Plural memory controllers
159	..Having variable cursor speed	520	..Using different access modes
160	..Cursor key	522	..Memory access timing signals
161	..Joystick	530	..Memory arbitration
162	..Positional storage means	531	..Plural storage devices
163	..Mouse	532	..Data transfer between memories
164	...Rotatable ball detector	533	...Data transfer between system memory display memory
165	....Photosensor encoder	534	..Double buffered
166	...Optical detector	535	..Interleaved
167	..Trackball	536	.Shared memory
168	.Including keyboard	537	..Unified memory architecture (e.g., UMA)
169	..Portable (i.e., handheld, calculator, remote controller)	538	.Memory allocation
170	..Light source associated with each key	539	.Memory partitioning
171	..Having foreign language capability (e.g., Japanese, Chinese)	540	.Frame buffer
172	..Having programmable function key	541	..Multi-format frame buffer
173	.Touch panel	542	..Memory for storing video data
174	..Including impedance detection	543	..Off-screen memory
175	..Including optical detection	544	..Color memory
176	..Transparent substrate having light entrapment capability (i.e., waveguides)	545	...Multiple planes
		546	..Character memory
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552	.Texture memory	699	.Controller automatically senses monitor resolution
553	.Display list memory		.Waveform generator coupled to display elements
554	.Multi-port memory	208	.Field period polarity reversal
555	.For storing compressed data		.Having three or more voltage levels
556	.For storing condition code, flag or status	209	.Display power source
557	.Cache	210	.Regulating means
558	.First in first out (i.e., FIFO)	211	.Synchronizing means
559	.Register	212	.Controlling the condition of display elements
560	.Row buffer (e.g., line memory)	213	.Including priming means
561	.Logical operations	214	<b>PLURAL DISPLAY SYSTEMS</b>
562	.Bit block transfer		.Data transmitted or received at surface of display
563	.Mask data operation	215	.Tiling or modular adjacent displays
564	.Addressing	1.1	.Remotely located
565	.Using memory for storing address information	1.2	.Presentation of similar images
566	.Address manipulation	1.3	.Wireless connection
567	.Using decoding		.Diverse systems (e.g., CRT or LCD interface)
568	.Address translation (e.g., between virtual and physical addresses)	2.1	.Frame, field or scan rate conversion
569	.For 2D coordinate to linear address conversion	2.2	.Number of pixels per row or column conversion (i.e., resolution conversion)
570	.Page mode	2.3	.Controller automatically senses monitor resolution
571	.Memory addresses arranged in matrix row and column addresses)	3.1	<b>SINGLE DISPLAY SYSTEM HAVING STACKED SUPERIMPOSED DISPLAY DEVICES (E.G., TANDEM)</b>
572	.Address generator	3.2	.Diverse display devices
573	.Plural address generators	3.4	.Three-dimensional arrays
574	.Read/Write address generator		<b>IMAGE SUPERPOSITION BY OPTICAL MEANS (E.G., HEADS-UP DISPLAY)</b>
204	<b>DISPLAY DRIVING CONTROL CIRCUITRY</b>	4	.Operator body-mounted heads-up display (e.g., helmet mounted display)
205	.Physically integral with display elements		.Plural image superposition
206	.Having common base or substrate	5	<b>DATA RESPONSIVE CRT DISPLAY CONTROL</b>
207	.Light detection means (e.g., with photodetector)	6	.CRT provides display control
690	.Intensity or color driving control (e.g., gray scale)	7	.Data responsive deflection and intensity control
691	.Temporal processing (e.g., pulse width variation over time)	8	.Data responsive deflection control
692	.Binary weighted	9	.X and Y axis deflection control
693	.Non-binary weighted	10	.Curvilinear deflection control (e.g., lissajous)
694	.Spatial processing (e.g., patterns or subpixel configuration)	11	.Stroke or vector
695	.Subpixels have different shapes	12	.Strokes for forming characters
696	.Changing of subpixel location over time	13	.Up/down counter
697	.Including optical means	14	.Impedance Array
698	.Adjusting display pixel size or pixels per given area (i.e., resolution)	15	
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20	.Data responsive intensity control	56	..Image shifting means (i.e., traveling message)
21	.Magnetic element array	57	...Having endless belt or tape reader
22	.Color display		..Crosstalk elimination
23	.Graphic and alphanumeric display	58	..Matrix for conveying alphanumeric data
24	.Graphic display	59	..Fluid light emitter (e.g., gas, liquid, or plasma)
25	.Alphanumeric display		...Shifting means
26	..Character generator	60	....Specified plasma coupling path
27	.Combined with storage means		...Intensity control
28	..Addressing	61	...Liquid light emitter
29	.Delay line	62	...Phosphor excited by fluid response
30	<b>PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT)</b>	63	...Particular discharge path
31	.Physically movable array	64	...More than two electrodes per element
32	.Optical means interposed in viewing path (e.g., filters, lens, etc.)	65	...Means for combining selective and sustain signals
33	.Segmented display elements	66	....Resistor-diode arrangement
34	..Seven segment display	67	.....Including transformer
35	..Bar graph	68	....Electrode insulated from fluid medium
36	...Electroluminescent display elements	69	...Color
37	...Gas discharge display segments (e.g., plasma)	70	..Incandescent
38	...Liquid crystal display segments	71	..Cathodoluminescent type
39	...Light-emitting diode segments (LEDS)	72	...Vacuum fluorescent
40	...Plural (e.g., stacked, adjacent)	73	...Field emissive (e.g., FED, Spindt, microtip, etc.)
41	.Fluid light-emitting display elements (e.g., gas, plasma)	74.1	..Electroluminescent
42	...Controlling circuitry	75.1	...Brightness or intensity control
43	.Mask or electrode shape	75.2	...Having compensating pulse
44	..Solid light-emitting display elements	76	...Field period polarity reversal
45	...Electroluminescent	77	...Driving means integral to substrate
46	...Light-emitting diodes	78	...Optical addressing (e.g., photodetection)
47	.Fluorescent elements	79	..Solid body light emitter (e.g., LED)
48	..Light-controlling display elements	80	...Color
49	...Electrochromic elements	81	..Light-controlling display elements
50	...Liquid crystal elements	82	...Electroscopic (e.g., movable electrodes or electrostatic elements)
51	....Display element selection circuitry	83	...Magneto-optic
52	....Power supply generating circuitry	84	...Liquid crystal display elements (LCD)
53	....Specific waveform (e.g., square waveforms, sinusoidal)	85	....Color
54	.....Field period polarity reversal	86	....Gray scale capability (e.g., halftone)
55	.Display elements arranged in matrix (e.g., rows and columns)	87	
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90	....Control means at each display element	949	<b>ANIMATION PROCESSING METHOD</b>
91	.....Diode or varistor	950	.Sprite processing
92	.....Thin film transistor (TFT)	951	..Key frame processing
93	.....Redundancy (e.g., plural control elements or electrodes)	952	.Simulation
94	.....Waveform generation	953	.Geometric processing
95	.....Three or more voltages	954	..Quaternions
96	.....Field period polarity reversal	955	.Morphing
97	.....Ferroelectric liquid crystal elements	956	.Language driven animation
98	....Specific display element control means (e.g., latches, memories, logic)	957	..Actor
99	.....Particular timing circuit	958	.Collision avoidance
100	.....Particular row or column control (e.g., shift register)	959	.Object path adherence
101	....Data signal compensation in response to temperature	960	.Iterative display of preconfigured images
102	....Backlight control	961	<b>OPERATOR INTERFACE WITH VISUAL STRUCTURE OR FUNCTION DICTATED BY INTENDED USE</b>
103	....Grouped electrodes (e.g., matrix partitioned into sections)	962	.Operator interface for marketing or sales
104	....Input/output liquid crystal display panel	963	.Calendar or scheduling
105	...Electrochromic elements	964	.CAD or CAM (e.g., interactive design tools)
106	...Thermochromic elements	965	.For process control and configuration
107	...Particle suspensions (e.g., electrophoretic)	966	.Computer process (e.g., operation of computer)
108	..Plural mechanically movable display elements	967	...Visual or iconic programming
109	...Having shutters	968	...Interface for database querying and retrieval
110	...With motor or rotor driver means	969	..Network layout and operation interface
111	...With a permanent magnet placed on movable display elements	970	.Instrumentation and component modelling (e.g., interactive control panel)
		970.1	.Amusement or marital aid interface
		971	<b>COOPERATIVE DECISION SUPPORT SYSTEMS FOR GROUPS OF USERS</b>
		972	<b>INSERTED REAL-TIME VIDEO IN OPERATOR INTERFACE</b>
		973	<b>SCROLL TOOL (E.G., WINDOW SCROLL BARS)</b>
		974	<b>SLIDER CONTROLS AS ON-SCREEN OBJECTS IN OPERATOR INTERFACE</b>
901	<b>ELECTRONIC BOOK WITH DISPLAY MENU DISPLAY</b>	975	<b>POP-UP DIALOG BOX FOR ENTRY</b>
903	<b>MODULAR DISPLAY</b>	976	<b>3-D ICONS</b>
904	<b>DISPLAY WITH FAIL/SAFE TESTING FEATURE</b>	977	<b>DYNAMIC ICON (E.G., ANIMATED OR LIVE ACTION)</b>
905	<b>DISPLAY DEVICE WITH HOUSING STRUCTURE</b>	978	<b>AUDIO INTERACTION AS PART OF AN OPERATOR INTERFACE</b>
947	<b>FONT CHARACTER EDGE PROCESSING</b>		
948	<b>ALTERATION OF STORED FONTS TO MAINTAIN FEATURE CONSISTENCY THROUGHOUT SCALED FONT</b>		

**CROSS-REFERENCE ART COLLECTIONS**

901	<b>ELECTRONIC BOOK WITH DISPLAY MENU DISPLAY</b>
903	<b>MODULAR DISPLAY</b>
904	<b>DISPLAY WITH FAIL/SAFE TESTING FEATURE</b>
905	<b>DISPLAY DEVICE WITH HOUSING STRUCTURE</b>
947	<b>FONT CHARACTER EDGE PROCESSING</b>
948	<b>ALTERATION OF STORED FONTS TO MAINTAIN FEATURE CONSISTENCY THROUGHOUT SCALED FONT</b>

**FOREIGN ART COLLECTIONS**

**FOR 000 CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collection listed below. These collections contain ONLY foreign patents or nonpatent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

**PLURAL PHYSICAL DISPLAY ELEMENT**

- CONTROL SYSTEM (E.G., NON-CRT) (345/30)**
  - .Display elements arranged in matrix (e.g., rows and columns) (345/55)
- FOR 100 ..Cathodoluminescent type (345/74)
- FOR 101 ...Vacuum fluorescent (345/75)
- FOR 102 ..Memory (345/521)
- FOR 103 .Data manipulation (e.g., masking, interpolation) (345/523)
- FOR 104 ..Logical operation (345/524)
- FOR 105 ..Bit block transfer (345/525)
- FOR 106 .Data transfer between graphic system components (345/526)
- FOR 107 **DISPLAY STORAGE DEVICE (345/507)**
- FOR 108 .Color memory (345/186)
- FOR 109 ..Multiple planes (345/510)
- FOR 110 ...Addressing with priority (345/188)
- FOR 111 .Bit map or graphic memory (345/509)
- FOR 112 ..Addressing (345/515)
- FOR 113 ..Mask data operation (345/191)
- FOR 114 .Character memory (345/192)
- FOR 115 ..Addressing (345/193)
- FOR 116 ..Character generator (345/194)
- FOR 117 ...Multiple fonts (345/195)
- FOR 118 .Row buffer (e.g., line memory) (345/196)
- FOR 119 .Register (345/513)
- FOR 120 ..Shift register (345/197)
- FOR 121 ...With routing logic (345/198)
- FOR 122 .Color look-up-table (e.g., palette) (345/199)
- FOR 123 .Addressing circuitry (345/516)
- FOR 124 ..Memory addresses arranged in matrix (e.g., row and column addresses) (345/517)

- FOR 125 .Plural storage devices (345/508)
- FOR 126 ..Data transfer between memories (345/511)
- FOR 127 .Shared memory (345/512)
- FOR 128 .Condition code, flag, or status (345/514)
- FOR 129 .Multiple port access (345/518)
- FOR 130 .Data compression or compaction (345/202)
- FOR 131 .Significant data assignment in storage device (345/203)
- FOR 132 **PLURAL DISPLAY SYSTEMS (345/1)**
- FOR 133 .Remotely located (345/2)
- FOR 134 .Diverse systems (e.g., CRT/LCD interface) (345/3)
- FOR 135 **DISPLAY ATTRIBUTE CONTROLLER (345/112)**
- FOR 136 .Particular overlay (e.g., superimposing feature) (345/113)
- FOR 137 ..Foreground and background (345/114)
- FOR 138 .Simultaneous diverse images (345/115)
- FOR 139 ..Character and graphical display (345/116)
- FOR 140 .Specified image of abnormal condition (345/117)
- FOR 141 .Having image confined to designated region (e.g., image clipping) (345/118)
- FOR 142 .Image movement or position control (e.g., panning) (345/121)
- FOR 143 ..Scrolling (345/123)
- FOR 144 ...Alphanumeric (345/124)
- FOR 145 ...Graphical (345/125)
- FOR 146 ..Rotation (345/126)
- FOR 147 .Image size control (345/127)
- FOR 148 ..Alphanumeric (345/128)
- FOR 149 ...Reduction (345/129)
- FOR 150 ...Enlargement (345/130)
- FOR 151 ..Graphical (345/131)
- FOR 152 .Defined resolution (e.g., EGA, VGA) (345/132)
- FOR 153 .Graphic display (345/133)
- FOR 154 ..Waveform display (e.g., oscilloscope type) (345/134)
- FOR 155 ..Vector display (345/135)
- FOR 156 ..With image smoothing control (e.g., anti-aliasing) (345/136)
- FOR 157 ...Convolving technique (345/137)
- FOR 158 ..Averaging technique (345/138)
- FOR 159 ..Perspective (345/139)

FOR 160 ..Bar graph (345/140)  
 FOR 161 .Character display (345/141)  
 FOR 162 ..Calligraphic (345/142)

**COMPUTER GRAPHICS PROCESSING  
(345/418)**

.Character generating (345/467)

FOR 163 ..Character border (345/144)  
 FOR 164 **CURSOR MANIPULATION (345/145)**  
 FOR 165 .Menu selection (345/146)

**DISPLAY ATTRIBUTE CONTROLLER  
(345/112)**

FOR 166 .Intensity control (e.g., gray scale) (345/147)  
 FOR 167 ..Temporal processing (e.g., pulse width variation over time) (345/148)  
 FOR 168 ..Spatial processing (e.g., patterns or subpixel configurations) (345/149)  
 FOR 169 .Selectable color attributes (345/150)  
 FOR 170 ..Including optical means (345/151)  
 FOR 171 ..Designated subpixel arrangement (345/152)  
 FOR 172 ..Color bit data modification or conversion (345/153)  
 FOR 173 ...Format change (e.g., NTSC to RGB, RGB to composite, or XYZ to RGB) (345/154)  
 FOR 174 ...Change in number of bits for a designated color (e.g., 4 bits to 8 bits, 8 bits to 4 bits) (345/155)

**COMPUTER GRAPHICS PROCESSING  
(345/418)**

FOR 175 .Synchronization of diverse media (345/302)  
 FOR 176 **OPERATOR INTERFACE (345/326)**  
 FOR 177 .Interaction in a television environment (345/327)  
 FOR 178 ..For video segment editing or sequencing (345/328)  
 FOR 179 .For plural users or sites (345/329)  
 FOR 180 ..Computer conferencing (345/330)  
 FOR 181 ..Computer supported cooperative work (345/331)  
 FOR 182 ...Group window (345/332)  
 FOR 183 .Interface customization or edition (345/333)  
 FOR 184 ..Graphical appearance (345/334)  
 FOR 185 ..Link between object and task or function (e.g., client/server) (345/335)

FOR 186 .Having on-line help (345/336)  
 FOR 187 ..Adaptive to user skill level (345/337)  
 FOR 188 ..Context sensitive (345/338)  
 FOR 189 .On-screen workspace or object (345/339)  
 FOR 190 ..Window (345/340)  
 FOR 191 ...Window scrolled to needed portion (345/341)  
 FOR 192 ...Layout modification (e.g., move or resize) (345/342)  
 FOR 193 ...Window differentiation (345/343)  
 FOR 194 ....Priority (345/344)  
 FOR 195 .....Viewing lower priority window (345/345)  
 FOR 196 ...Interwindow link or communication (345/346)  
 FOR 197 ..Pop-up control (e.g., message or dialog box) (345/347)  
 FOR 198 ..Icon (345/348)  
 FOR 199 ...Metaphoric icon object (345/349)  
 FOR 200 ....Indexed book or notebook (345/350)  
 FOR 201 ....Office layout (e.g., filing cabinet, desk) (345/351)  
 FOR 202 ..Menu (345/352)  
 FOR 203 ...Sub-menu structure (345/353)  
 FOR 204 ...Using button array (345/354)  
 FOR 205 ..Interface represented by 3D space (345/355)  
 FOR 206 ..Hierarchy or network structure (345/356)  
 FOR 207 ...Navigation within structure (345/357)  
 FOR 208 .Gestured-based (345/358)

**COMPUTER GRAPHICS PROCESSING  
(345/418)**

.Three-dimension (345/419)  
 FOR 209 ..Mapping image onto surface of 3D object (345/425)  
 FOR 210 .Surface detail/characteristic (345/429)  
 FOR 211 ..Texture (345/430)  
 FOR 212 ..Color (345/431)  
 FOR 213 ..Intensity (345/432)  
 FOR 214 .Object processing (345/433)  
 FOR 215 ..Clipping (345/434)  
 FOR 216 ..Merge/overlay (345/435)  
 FOR 217 ..Affine (345/436)  
 FOR 218 ..Rotation (345/437)  
 FOR 219 ..Translation (345/438)  
 FOR 220 ..Sealing (345/439)



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CLASS 345 COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS